



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/591,331

08/31/2006

Kunihiko Daido

P-8839-US

9430

49443 7590 08/04/2009  
Pearl Cohen Zedek Latzer, LLP  
1500 Broadway  
12th Floor  
New York, NY 10036

EXAMINER

BASKIN, JEREMY S

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

08/04/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/591,331 | <b>Applicant(s)</b><br>DAIDO ET AL. |  |
|                              | <b>Examiner</b><br>Jeremy S. Baskin  | <b>Art Unit</b><br>3753             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/31/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 6-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 19 June 2009.

### ***Drawings***

2. The drawings are objected to because each of the figures is improperly labeled. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3753

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In lines 3-4, the claim recites "said elastic bodies comprise springs having the same diameter as said ring-shaped groove". The specification and drawings do not teach or show a plurality of springs having the same diameter of a ring-shaped groove. The claim has been examined on the merits, as best understood by the Examiner, to be the receiving holes are configured as a ring-shaped groove so as to receive a single elastic body of corresponding diameter.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makoto et al. (JP 3358147, abstract attached) in view of Saarem (3,827,670), in further view of, or taken with, Kerger et al. (5,037,066).

Art Unit: 3753

In regard to Claims 1, 3, and 5, Makoto teaches a torque limiter handle 61 of a fluid controller 1 having an operating mechanism 5 that moves vertically with the rotation of the handle. The handle element at 1 possesses a cover portion at 61 with a handle body 62 disposed within the lower portion of the cover portion which is connected to the operating mechanism. Receiving holes 61a within the cover portion work to receive elastic bodies, or springs 7 of the same diameter. Transmitting members 8 are attached at one end of the elastic bodies and translate a pushing force onto the handle body. The handle body has on its upper surface a ring-shaped concave portion 62a. A valve casing 2 has a fluid channel 21 therein with a valve membrane 3 opening and closing the fluid channel. The valve member is actuated by a lower end of the operating mechanism.

Makoto fails to teach where the ring-shaped concave portion engages a transmitted member that has a serration on its surface facing the transmitting member which is also serrated.

Saarem discloses a flow controller with torque limiting handle. Saarem teaches where a transmitted member 48 has a serration on its surface facing a serrated transmitting member 46. The transmitted member engages a ring-shaped concave portion of the handle 16, 56.

Makoto in view of Saarem fail to specifically teach where the serration of the transmitted and transmitting members comprises both inclined and vertical surfaces that are alternately arranged in a circumferential direction and where the inclined surfaces are tilted upwardly along the direction in which the cover portion is rotated to move down.

Kerger discloses a diaphragm flow controller with torque limiting handle. In Figure 1, Kerger teaches where the serration 38 of a transmitted member 36 and transmitting member 40 has both inclined and vertical surfaces that are alternately arranged in a circumferential direction

Art Unit: 3753

and where the inclined surfaces are tilted upwardly along the direction in which the cover portion 32 is rotated to move down (col. 2, lines 21-46).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate, on the ring-shaped concave portion of Makoto, a serrated transmitted member that mates to a serrated transmitting member, as taught by Saarem, where the serrated portion has both inclined and vertical surfaces, as further taught by Kerger, so as to effect a limited rotational force to the handle body in a singular direction.

7. In regard to Claims 2 and 4, Makoto fails to specifically teach where the handle body has receiving holes with elastic bodies inserted therein, a transmitting member disposed at one end of the elastic members, and a ring-shaped concave portion on the cover portion for engaging a serrated transmitted member.

However, the cover portion of Makoto possesses receiving holes for elastic members and the handle body possesses a ring-shaped concave portion as per the rejection of Claims 1, 3, and 5 above. The claimed embodiment has reversed the parts of the receiving holes and ring-shaped concave portion. Since the cover portion and handle body are mating structures, the claimed embodiment would not perform any significant or unexpected result over the rejected embodiment of Claims 1 and 3. Therefore, the subject matter of Claims 2 and 4 are deemed to be a mere reversal of parts over the prior art of Makoto and are thus rendered obvious to one of ordinary skill in the art. See MPEP 2144.04.

8. In regard to Claim 9, Makoto teaches where the receiving holes are configured in a ring shape, but fail to teach where the receiving holes form a singular groove.

Art Unit: 3753

Kerger teaches where a cover portion 32 possesses a ring shaped groove for receiving an elastic body 44.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate, in Makoto, an annular groove for the receiving holes on a cover portion, as taught by Kerger, so as to allow for the use of a single large spring connected to the transmitting member.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Akkerman (5,295,907) discloses a torque limiting handle with springs and receiving holes. Gunther (3,441,115) discloses a torque limiting valve handle with springs and spherical transmitting members. Hehli et al. (7,025,151) discloses a serrated transmitted member. Streun (2,608,377) discloses a torque limiting handle for valves with angled transmitted member. Williams et al. (4,619,437) discloses a torque limiting valve handle with springs and angled transmitted members.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy S. Baskin whose telephone number is (571) 270-7421. The examiner can normally be reached on Monday through Friday, 7:30AM to 5:00PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. B./

Examiner, Art Unit 3753

/Robin O. Evans/

Supervisory Patent Examiner, Art Unit 3753